**Amendments to the Claims**

This listing of the claims replaces all prior versions and listing of the claims in the present application.

Listing of Claims

1-99. (canceled)

100. (currently amended) A location service system for locating a target mobile terminal, comprising:

a client terminal which transmits a location request specifying the target mobile terminal, and requested accuracy and requested allowable age;

a positioning system which produces location information of the target mobile terminal; and

a gateway which transmits the location request to said positioning system and stores previously obtained location information of the target mobile terminal,

wherein the gateway performs a first privacy check for verifying ~~in response to~~ the location request, performs a reusability check to determine ~~and~~ if the stored location information satisfies the requested accuracy and the requested allowable age specified in said verified location request, and if the reusability check is affirmative, then performs a second privacy check on the stored location information, without transmitting the verified location request to the positioning system, in order to decide whether said gateway can transmit the

stored location information to the client terminal.

101. (currently amended) The location service system of claim 100, wherein said gateway ~~system~~ transmits a notification message to said target mobile terminal.

102. (currently amended) The location service system of claim 101, wherein said gateway ~~network~~ stores a privacy profile of said target mobile terminal, and transmits said notification message to said target mobile terminal if said privacy profile indicates that said notification message is to be sent to said target mobile terminal.

103. (previously presented) The location service system of claim 100, wherein said gateway transmits a verification request message to said target mobile terminal and receives a verification report from the target mobile terminal to determine if the verification report allows said stored location information to be forwarded to said client terminal.

104. (previously presented) The location service system of claim 103, wherein said gateway stores a privacy profile of said target mobile terminal, and transmits said verification request message to said target mobile terminal if said privacy profile indicates that said location request is to be verified by said target mobile terminal.

105. (currently amended)A location method of a location service system for locating a target mobile terminal, comprising:

transmitting, at a client terminal, a location request

specifying the target mobile terminal, requested accuracy and requested allowable age;

transmitting, at a gateway which stores previously obtained location information of the target mobile terminal, the location request to a positioning system which produces location information of the target mobile terminal in response to the location request from the gateway;

performing, at the gateway, a first privacy check ~~in response to~~ for verifying the location request from the client terminal;

performing a reusability check to determine if the stored location information satisfies the requested accuracy and the requested allowable age specified in said verified location request; and

performing, at the gateway, a second privacy check on said stored location information in order to decide whether the gateway can transmit the stored location information to the client terminal skipping the step of transmitting the verified location request to the positioning system if said reusability check is affirmative ~~the stored location information satisfies the requested accuracy and the requested allowable age~~.

106. (previously presented) The method of claim 105, wherein the performing of the second privacy check comprises the step of transmitting a notification message to said target mobile terminal.

107. (previously presented) The method of claim 106, further comprising storing a privacy profile of said target mobile terminal, and wherein the performing of the second privacy check comprises determining if the privacy profile of the target mobile terminal indicates that said notification message is to be sent to said target mobile terminal.

108. (currently amended) The method of claim 105, wherein the performing of the second privacy check comprises:

transmitting a verification request message to said target mobile terminal;

receiving a verification report from the target mobile terminal; and

determining if the verification report allows said stored last known location information to be forwarded to said client terminal.

109. (previously presented) The method of claim 108, further comprising storing a privacy profile of said target mobile terminal, and wherein the performing of the second privacy check comprises determining if the privacy profile of the target mobile terminal indicates that said location request is to be verified by said target mobile terminal.

110. (currently amended)A gateway of a location service system for locating a target mobile terminal, wherein the system comprises:

a client terminal which transmits a location request

specifying the target mobile terminal, requested accuracy and requested allowable age; and

a positioning system which produces location information of the target mobile terminal in response to the location request from the gateway,

wherein the gateway stores previously obtained location information of the target mobile terminal, transmits the location request to the positioning system, performs a first privacy check ~~in response to~~ <u>for verifying</u> the location request from the client terminal<u>, performs a reusability check to determine</u> ~~and~~ if the stored location information satisfies the requested accuracy and the requested allowable age <u>specified in the verified location request</u>, ~~then~~ <u>and if the reusability check is affirmative,</u> performs a second privacy check <u>on said stored location information,</u> without transmitting the <u>verified</u> location request to the positioning system<u>,</u> in order to decide whether the gateway can transmit the stored location information to the client terminal.

111. (previously presented) The gateway of claim 110, wherein said gateway transmits a notification message to said target mobile terminal, and subsequently forwards the stored location information to said client terminal.

112. (previously presented) The gateway of claim 111, wherein said gateway stores a privacy profile of said target mobile terminal, and transmits said notification message to said target mobile terminal if said privacy profile indicates that

said notification message is to be sent to said target mobile terminal.

113. (currently amended) The ~~method~~ gateway of claim 110, wherein said gateway transmits a verification request message to said target mobile terminal, receives a verification report from the target mobile terminal, and determines if the verification report allows the stored location information to be forwarded to the client terminal.

114. (currently amended) The ~~method~~ gateway of claim 113, wherein said gateway stores a privacy profile of said target mobile terminal, and transmits said verification request message to said target mobile terminal if said privacy profile indicates that said location request is to be verified by said target mobile terminal.

115. (new) A location service system for locating a target mobile terminal, comprising:

a plurality of client terminals which transmit a location request specifying the target mobile terminal, and accuracy and allowable age of stored location information;

a positioning system which produces location information of the target mobile terminal; and

a gateway which stores location information of the target mobile terminal previously obtained from said positioning system as a result of the gateway transmitting thereto an initial location request from one of said client terminals,

wherein the gateway performs a first privacy check for verifying a current location request from any of said client terminals, performs a reusability check to determine if the stored location information satisfies the accuracy and allowable age specified in said verified current location request, and if the reusability check is affirmative, then performs a second privacy check to determine if the stored location information further satisfies a condition specified by said target mobile terminal and transmits the stored location information to the requesting client terminal if the second privacy check is affirmative.

116. (new) The location service system of claim 115, wherein the gateway transmits said verified current location request to the positioning system to obtain current location information of the target mobile terminal if said reusability check is negative and performs a second privacy check to determine if the current location information satisfies a condition specified by said target mobile terminal and transmits the current location information to the requesting client terminal if the second privacy check is affirmative.

117. (new) The location service system of claim 115, wherein said gateway transmits a notification message to said target mobile terminal.

118. (new) The location service system of claim 117, wherein said

gateway stores a privacy profile of said target mobile

terminal and transmits said notification message to said target mobile terminal if said privacy profile indicates that said notification message is to be sent to said target mobile terminal.

119. (new) The location service system of claim 115, wherein said gateway transmits a verification request message to said target mobile terminal and receives a verification report from the target mobile terminal to determine if the verification report allows said stored location information to be transmitted to said client terminal.

120. (new) The location service system of claim 119, wherein said gateway stores a privacy profile of said target mobile terminal and transmits said verification request message to said target mobile terminal if said privacy profile indicates that said current location request is to be verified by said target mobile terminal.

121. (new) The location service system of claim 115, wherein said condition specifies a time-zone and an area, and wherein said gateway transmits said stored location information to said client terminal if time of estimation and estimated location of said stored location information respectively satisfy said specified time-zone and area.

122. (new) A location method of a location service system for locating a target mobile terminal, comprising the steps of:

a) transmitting, from one of a plurality of client terminals, a location request specifying the target mobile terminal;

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b) transmitting, from a gateway, an initial location request from one of said client terminals to a positioning system to obtain current location information of the target mobile terminal and storing the current location information as previously obtained location information of the target mobile terminal;

c) transmitting, from any of said client terminals, a current location request specifying the target mobile terminal, and accuracy and allowable age of stored location information;

d) performing, at said gateway, a first privacy check for verifying said current location request;

e) performing a reusability check to determine whether the stored location information satisfies the accuracy and allowable age specified in said verified current location request; and

f) if the reusability check is affirmative, performing, at said gateway, a second privacy check to determine whether the stored location information satisfies a condition specified by said target mobile terminal and transmitting the stored location information to the requesting client terminal if the second privacy check is affirmative.

123. (new) The location method of claim 122, wherein step (f) comprises the steps of:

transmitting said verified current location request from said gateway to the positioning system to obtain current location information of the target mobile terminal if the first privacy check is negative; and

performing said second privacy check to determine whether the current location information satisfies said condition; and

transmitting the current location information to the requesting client terminal if the second privacy check is affirmative.

124. (new) The method of claim 122, wherein step (e) comprises transmitting a notification message to said target mobile terminal.

125. (new) The method of claim 123, further comprising the steps of:

storing a privacy profile of said target mobile terminal; and

transmitting said notification message to said target mobile terminal if said privacy profile indicates that said notification message is to be sent to said target mobile terminal.

126. (new) The method of claim 123, wherein step (e) comprises the steps of:

transmitting a verification request message to said target mobile terminal;

receiving a verification report from the target mobile terminal; and

determining if the verification report allows said stored location information to be transmitted to said client terminal.

127. (new) The method of claim 126, wherein step (e) comprises the steps of:

storing a privacy profile of said target mobile terminal; and

transmitting said verification request message to said target mobile terminal if said privacy profile indicates that said current location request is to be verified by said target mobile terminal.

128. (new) The method of claim 122, wherein said condition specifies a time-zone and an area, and wherein said gateway transmits said stored location information to said client terminal if time of estimation and estimated location of said stored location information respectively satisfy said specified time-zone and area.

129. (new) A gateway of a location service system for locating a target mobile terminal, wherein the location service system comprises:

a plurality of client terminals which transmit a location request specifying the target mobile terminal, and accuracy and allowable age of stored location information; and

a positioning system which produces location information of the target mobile terminal,

wherein said gateway stores location information of the target mobile terminal previously obtained from said positioning system as a result of the gateway transmitting an initial location request from one of said client terminals to said positioning system, performs a first privacy check for verifying a current location request from any of said client terminals, performs a reusability check to determine if the stored location information

satisfies the accuracy and allowable age specified in said verified current location request, and if the reusability check is affirmative, then performs a second privacy check to determine if the stored location information further satisfies a condition specified by said target mobile terminal and transmits the stored location information to the requesting client terminal if the second privacy check is affirmative.

130. (new) The gateway of claim 129, wherein the gateway transmits said verified current location request to the positioning system to obtain current location information of the target mobile terminal if the reusability check is negative, and performs a second privacy check to determine if the stored location information further satisfies a condition specified by said target mobile terminal and transmits the verified current location information to said client terminal if the second privacy check is affirmative.

131. (new) The gateway of claim 129, wherein said gateway transmits a notification message to said target mobile terminal.

132. (new) The gateway of claim 131, wherein said gateway stores a privacy profile of said target mobile terminal and transmits said notification message to said target mobile terminal if said privacy profile indicates that said notification message is to be sent to said target mobile terminal.

133. (new) The gateway of claim 129, wherein said gateway transmits a verification request message to said target mobile

terminal and receives a verification report from the target mobile terminal to determine if the verification report allows said stored location information to be transmitted to said client terminal.

134. (new) The gateway of claim 133, wherein said gateway stores a privacy profile of said target mobile terminal and transmits said verification request message to said target mobile terminal if said privacy profile indicates that said current location request is to be verified by said target mobile terminal.

135. (new) The gateway of claim 129, wherein said condition specifies a time-zone and an area, and wherein said gateway transmits said stored location information to said client terminal if time of estimation and estimated location of said stored location information respectively satisfy said specified time-zone and area.